



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/646,139	09/13/2000	Tatsuaki Ishida	10873.384USW	2382

7590

02/13/2002

Merchant & Gould  
PO Box 2903  
Minneapolis, MN 55402-0903

EXAMINER

RICKMAN, HOLLY C

ART UNIT

PAPER NUMBER

1773

DATE MAILED: 02/13/2002

5

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-5

# Office Action Summary

Application No.

09/646,139

Applicant(s)

ISHIDA ET AL.

Examiner

Holly Rickman

Art Unit

1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 2-7 and 9-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-7 and 9-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4. 6) ☐ Other: .

## DETAILED ACTION

### *Claim Objections*

1. Claims 2-7 and 9-12 are objected to because of the following informalities: claims 2-7 depend directly or indirectly from canceled claim 1 and claims 9-12 depend directly or indirectly from canceled claim 8. For purposes of examination, the Examiner has assumed that claims 2-7 depend from new claim 13 and claims 9-12 depend from new claim 14. Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 6-7 and 11-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "hard protective film" in claims 6-7 and 11-12 is a relative term which renders the claims indefinite. The term "hard protective film" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. There is no indication in the specification as to what degree or measure of hardness meets the claim limitation "hard protective film."

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 2-3, 9, and 13-14 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 62-124622 (see abstract).

JP 62-124622 discloses a magnetic recording film having a non-magnetic glass substrate that is embossed and has a ferromagnetic material formed in the recessed portions of the embossed pattern. With respect to claims 2-3 and 13, it is the Examiner's contention that the structure taught by JP 62-124622. The reference teaches forming a pattern of ferromagnetic material on a substrate wherein the ferromagnetic regions are separated by a non-magnetic material. In the instant case, the substrate material and the non-magnetic material separating the ferromagnetic regions are the same (i.e., SiO<sub>2</sub>).

6. Claims 13 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 55-70935 (see abstract).

JP 55-70935 discloses a magnetic recording film having a non-magnetic Si substrate having an embossed pattern of a ferromagnetic material formed thereon. A polymeric material is formed between the ferromagnetic areas.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 62-124622 in view of JP 61-190719.

JP 62-124622 discloses a magnetic recording film having a non-magnetic glass substrate that is embossed and has a ferromagnetic material formed in the recessed portions of the embossed pattern. The reference fails to disclose a protective overcoat of less than 20 nm in thickness formed on the ferromagnetic layer and the substrate.

JP 61-190719 teaches that it is known in the art to use a carbon protective film of about 20 nm (200 angstroms) on top of a ferromagnetic layer.

It would have been obvious to one of ordinary skill in the art at the time of invention to add a carbon protective coat as taught by JP 61-190719 on top of the ferromagnetic layer taught by JP 62-124622 in order to provide a recording medium with improved surface protection.

9. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 55-70935 in view of JP 61-190719.

JP 55-70935 discloses a magnetic recording film having a non-magnetic Si substrate having an embossed pattern of a ferromagnetic material formed thereon. A polymeric material is

Art Unit: 1773

formed between the ferromagnetic areas. The reference fails to disclose a protective overcoat of less than 20 nm in thickness formed on the ferromagnetic layer and the substrate.


JP 61-190719 teaches that it is known in the art to use a carbon protective film of about 20 nm (200 angstroms) on top of a ferromagnetic layer.

It would have been obvious to one of ordinary skill in the art at the time of invention to add a carbon protective coat as taught by JP 61-190719 on top of the ferromagnetic layer taught by JP 55-70935 in order to provide a recording medium with improved surface protection.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Holly Rickman whose telephone number is (703) 305-2642. The examiner can normally be reached on Monday-Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau can be reached on (703) 308-2367. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

  
Holly C. Rickman  
Examiner  
Art Unit 1773

hcr  
February 11, 2002